

ZERO BACK PRESSURE CONVEYOR

Abstract

A conveyor comprising an outer roller-top belt loop and an inner drive belt loop inside the outer belt loop for accurate and smooth control of conveyed articles. Rollers on the outer belt loop extend beyond outer and inner sides of the roller-top belt. The inner drive belt has an outer surface that frictionally contacts the rollers beneath the inner side of the outer belt loop along an article-conveying carryway portion of the conveying path. Relative motion between the two belts causes the drive belt to rotate the rollers it contacts. The outer belt loop and the inner belt loop can be driven at different speeds by separate drives. The relative speeds of the two belts determine the direction and speed of rotation of the rollers.